

**State Board of Education  
April 13, 2010  
Item D**

**Team:** Commissioner's Office

**Discussion Topic:** NCEE Board Examination System

**Background Information:**

Vermont has an opportunity to participate with seven other states in piloting some of the best instructional systems and examinations with the intent of dramatically increasing the number of students who leave high school ready to succeed in college. The focus for our state is on allowing high schools that choose to participate to adopt some of the best (and proven) instructional practices, to provide a powerful system of support to our struggling students, our most able students, and everyone in between, and to motivate our high school students to take tough courses and study hard in school. Participation by schools in this effort is entirely voluntary, and only students who choose to will participate.

**Purpose of Discussion:** NCEE President Marc Tucker will present a briefing on the Board Examination System.

**Cost Implications:** N/A

**Staff Available:** Armando Vilaseca; Rae Ann Knopf



---

**State of Vermont**  
**Vermont Department of Education**  
120 State Street  
Montpelier, VT 05620-2501

## **MEMORANDUM**

**To: Superintendents, High School Principals, School Board Members**  
**From: Armando Vilaseca, Commissioner**  
**Re: Invitation to Briefing on Board Examination Systems**  
**Date: March 10, 2010**

---

This memo is to invite you to a briefing on the Board Examination Systems program of the National Center on Education and the Economy (NCEE) with Marc Tucker, president. The briefing for superintendents, high school principals, and school board members will take place on Tuesday, April 13, 2010 from 3:30 to 5:00 p.m. in the Pavilion auditorium at 109 State Street in Montpelier. See below for registration information.

Vermont has a wonderful opportunity to participate with seven other states in piloting some of the best instructional systems and examinations with the intent of dramatically increasing the number of students who leave high school ready to succeed in college. NCEE introduced the Board Examination idea in its report, *Tough Choices or Tough Times*, in late 2006. The report received wide acclaim, and was the cover feature of TIME magazine and praised broadly by educators and the media.

As we strive to insure our students are prepared for post-secondary education without remediation and to be globally competitive this is an opportunity for high schools in Vermont to be demonstration sites for one of the Board Examination Systems. NCEE has recently received funding from the Gates Foundation to support this work and anticipates additional funding for the next three to four years through a combination of federal and private foundation support. The five Board Examination Systems programs already identified by NCEE include ACT's QualityCore; the Cambridge International Examination's General Certificate of Secondary Education (IGCSE) and their AICE program; the College Board's Advanced Placement program; the International Baccalaureate Diploma program; and Pearson/Edexcel's IGCSE and A-level programs.

The focus for our state is on allowing high schools that choose to participate to adopt some of the best (and proven) instructional practices in the world, to provide a powerful system of support to our struggling students, our most able students, and everyone in between, and to motivate our high school students to take tough courses and study hard in school. This will be a great opportunity for schools as they look to differentiate themselves.

At a time of constrained resources, the Board Examination Systems program offers an opportunity to take advantage of enormous investments in time and money made by others – to stand on the shoulders of the countries that have developed the most successful instructional systems in the world.

Participation by schools in this effort is entirely voluntary, and only students who choose to will participate.

As we prepare our proposal to the U.S. Department of Education for Race to the Top, I would like to invite you to this briefing with Marc Tucker. For more information about NCEE and State Board Examinations here are a few resources:

NCEE Web site: <http://www.ncee.org/index.jsp;jsessionid=aoFJ0bozEmj9?setProtocol=true>

Attachments:

- Board Examination Providers Background Information
- State Consortium on Board Examination Systems Frequently Asked Questions
- Brief Prospectus for a State Consortium on Board Examination Systems

**When:** Tuesday, April 13, 2010

3:30 – 5:00 p.m.

**Where:** Pavilion Auditorium

109 State Street

Montpelier

Enter building on Aiken Place

Photo ID required

**To Register:** Go to <http://www.surveymonkey.com/s/NCEEBriefingRegistration>.

**Contact:** Cindy Lee, (802) 828-0770, [cindy.lee@state.vt.us](mailto:cindy.lee@state.vt.us).

## **Board Examination Providers Background Information**

When NCEE began the research for this project, we consulted with experts all over the world to identify those organizations in a position to provide the world's best board examinations to American states. Some countries have created national instructional systems for their own use that are not available beyond their borders. They are not listed below. Of those remaining two are American. Two are British. And one is essentially non-national.

We have defined a board examination system as a complete high school level instructional system leading to a qualification, comprised of a coherent program of courses constituting a core curriculum, syllabi for those courses, high quality examinations based on the syllabi and including multiple methods of assessment, as well as training for the teachers who teach these courses and materials to support their practice. By "qualification" we mean a piece of paper certifying that the holder of the certificate has met a defined standard qualifying that student to take the next step in his or her path to further education or work, based on mastery of a particular program of study to a predetermined standard of accomplishment. The examinations are all "performance examinations" in the sense that the kind of performance the student must produce to earn a particular grade is known and understood by all. They are not graded on a curve.

Not all of the offerings from the providers on our list answer fully to this description. Some offer only modest curriculum guidance whereas others offer very detailed syllabi. Some only offer a couple of days of teacher training. Some don't offer a predefined program of studies, but provide instead a large selection of courses from which the user could select such a program. Some offer a qualification related to particular courses but do not offer a complete diploma program, meaning a defined standard that the student must meet to get a diploma based on that student's success in mastering an entire predefined program. Some offer only one-year courses. Others offer two-year courses with a single exam only after the full course has been completed. Some monitor the quality of courses actually offered by individual schools, and "delist" schools that do not meet their quality standards, and others only check to make sure that the schools that offer their programs have adequate security for the exams they administer. All of them, however, in our judgment, are more powerful in their design than any state level instructional system offered anywhere in the United States. And all could be adapted and expanded to include all of the characteristics of a full board examination system as we have defined that term.

We have visited at length with the organizations offering these programs and questioned them extensively. We have examined their syllabi, course materials, and exams carefully. In all cases, we have visited schools using their products and services, both in this country and abroad. In every case, we came away impressed with the quality of their work and their potential for greatly improving the performance of American students.

### ACT/QualityCore

ACT is, of course, one of the most respected names in American testing. From the beginning, ACT has emphasized the importance of curriculum-based examinations. QualityCore is a new offering from ACT, but when we went to visit with them in Iowa, we came away very impressed with the thought and care they had put into these courses and the accompanying exams. QualityCore today consists of 12 courses in English, mathematics, the sciences and U.S. History, and additional courses are under development. They can be used by a state as part of a larger grouping of integrated ACT products, including, among other things, the ACT exam itself, and the WorkKeys system. It should also be noted that ACT has reached out to America's Choice, a company affiliated with NCEE, to provide an extensive program of professional development to complement the QualityCore program. This offering provides extensive scaffolding to get students who are behind up to the standards built in to the QualityCore program.

### Cambridge International Examinations

The University of Cambridge exams are used in high schools in over 150 countries around the world. Singapore uses a customized version of their O-level exams to implement that country's widely-admired standards. Cambridge has a wide range of products. We focused on two of those products in our visits with them: their International General Certificate of Secondary Education (IGCSE) program and their Advanced International Certificate of Education (AICE) program, which is a diploma program based on their A and AS level courses. This latter program, piloted in Florida, involves the selection of courses from each of three curriculum areas: Mathematics and Sciences, Languages, and Arts and Humanities. It could be thought of as a diploma program with options. The curriculum includes a research project option that is factored into one's exam score, which aims to encourage initiative and creativity and the application of knowledge. We have visited the Cambridge team in England several times and always come away impressed with their thorough and thoughtful approach to their work.

### College Entrance Examination Board/Advanced Placement Examinations

The College Board, as it is generally known, was designed on the model of European board examination organizations; hence, its name. Their Advanced Placement exams have long had "gold standard" status in American high schools. These examinations, however, were not originally designed to provide a qualification on which college admission could be based. Instead, they were designed to provide an opportunity for high school students to take college-level courses for which colleges would offer college credit. In recent years, however, some selective colleges have restricted college credit to students earning only the highest score possible on the exam, and have instead chosen to take performance on these exams into account in their admission decisions, which has turned the AP courses and tests into something very like a conventional qualification. At present, these courses are available at the upper division level only. Though the College Board has other offerings available at lower grade levels, they do not at the moment have

anything available at the lower division level that would satisfy the requirements of our design. But, in our meetings with them, and in a subsequent letter, they have expressed strong interest in creating a new offering at that level if the states are interested in having them do so.

### International Baccalaureate Diploma Program

The IB program is a full diploma program, the only one on our list. This demanding program, taken as whole, is very carefully constructed to balance deep knowledge in the disciplines with the ability to integrate and apply that knowledge. It attends to the moral as well as the intellectual development of the student. To get the IB diploma, a student must complete the whole program, including exams in 6 subject areas, a community service requirement, an extended essay and a course on critical thinking, Theory of Knowledge. Options for subject courses include languages, math, computer science, experimental science, the arts and individuals and societies. Most courses are offered at both a standard level and a higher level, and all students are expected to take at least two courses at the higher level. What we have just described is the upper division program offered during the last two years of high school. The IB also offers a Middle Years Program for students in grades 6 through 10, but there are no external assessments for this program. Instead, the IB offers moderation of internal assessments created by IB teachers at this level thus ensuring they are graded on a common scale.

### Pearson/Edexcel

Pearson/Edexcel is one of three British organizations which are regulated by the UK's Qualifications and Curriculum Authority (QCA) to provide high school board exams to English state schools: Edexcel, AQA and OCR. Edexcel offers board exams in England and abroad. University of Cambridge International Exams (CIE) is linked to OCR, and CIE also offers their exams in England and abroad. Edexcel was purchased by Pearson, the global publishing company, some years ago. Their high school academic examinations are used in more than 80 countries. They are not as widely used around the world as those of the University of Cambridge, but their technical and career-related exams are more widely used all over the globe than any others. A state that is interested in developing an integrated academic and technical qualifications system would do well to look at Pearson/Edexcel. When we visited with them in London, we were impressed with the quality of their staff and the depth of their experience with curriculum matters. Pearson/Edexcel offers qualifications at both the lower secondary (the International General Certificate of Secondary Education) and upper secondary (A-levels) levels. They are a leader in e-learning, and onscreen testing, support more than 30 state education agencies with assessment and information services in all subjects, grades and content areas and have scalable capacity to support large-scale test administration in the United States.

## State Consortium on Board Examination Systems Frequently Asked Questions

What is a board examination system? A state instructional system, usually used at the high school level, that includes 1) a program of courses constituting a sound core program, 2) well thought-through syllabi for each course, 3) instructional materials matched to the syllabi, 4) high quality examinations derived directly from the course syllabi, 5) professional scoring of the exams that produces reliable scores, and 6) high quality training for the teachers who will teach the courses. Board exam systems are complete, high quality, tightly aligned instructional systems that provide all the support needed by students to reach high standards.

Who is putting the new consortium together? The National Center on Education and the Economy. NCEE has been benchmarking the worlds best standards and examinations systems for 20 years. Marc Tucker, its president, is one of the world's leading experts on academic and technical occupational standards. He created the National Board for Professional Teaching Standards, was co-director of the New Standards coalition and served as chair of the National Skill Standards Board's committee on standards policy and assessment.

What is NCEE proposing? That the state say to its high schools: We want you to offer at least one world class board exam system to your freshman and sophomore students, taken from a list vetted by NCEE and approved by the State Board. This list will include the University of Cambridge International General Certificate of Secondary Education Examinations (IGCSE), the Pearson/Edexcel International General Certificate of Secondary Education Examinations (IGCSE), and the ACT QualityCore program of courses for the freshman and sophomore years. The state will make sure the exams for these programs are offered to students by the end of their sophomore year. NCEE will do the research needed to set the pass point for these exams at the literacy level needed to be successful on the first credit-bearing courses in New York's public open-admissions 2-year and 4-year colleges. If they pass these exams they will be admitted to any of the state's open-admissions colleges the following fall, without having to take remedial courses. If they do not pass, their high school will get their sub-scores on the exams and will be obligated to prepare a program of study focused on those sections of the exams on which they did not do well. They will be able to retake the exams as often as they like. The aim is to get virtually everyone to the point that they will be able to pass. If they do pass, and choose not to go on to an open-admissions college, they will be able to stay in high school and take another board examination program designed to prepare them for admission to a selective college. Among the programs proposed for this purpose by NCEE are 1) a program of selected Advanced Placement courses from the College Board, 2) the International Baccalaureate Diploma Program, 3) the University of Cambridge Advanced International Certificate of Education program, 4) the Pearson/Edexcel "A Level" program and (5) the ACT QualityCore program (junior and senior year courses).

How would our state's students benefit from this system? The best research on the comparative effectiveness of state and national education systems shows that two factors account for most of the difference: the quality of the teachers and the presence of a system of the kind just described. Standards and tests do not change what goes on in classrooms. It is only when standards are translated into effective curriculum, with well designed syllabi, high quality instructional materials derived from the syllabi and training for teachers that is closely tied to the design of the courses they will be responsible for teaching, that the teachers and students get the support they need to reach the standards. This is especially true for students from low-income and minority families, who are even more dependent on the quality of the curriculum and instruction than students from more affluent families. NCEE has identified the most effective of the world's board examination systems available in English for use in the United States.

How would the proposed system fit into the state's accountability program and the Common Core Standards system proposed by the Council of Chief State School Officers and the National Governors Association? NCEE has agreed that, if the Common Core standards are adopted by a significant number of states, it will require the providers of the board examinations to align their offerings to the Common Core. The proposed system is not meant to replace the state's accountability system. At least at the outset, it is intended to be voluntary for the students participating in it, so it could not be used as the basis for the state accountability system.

But, if a state wants to do so, NCEE stands ready to help a state member of the consortium design an accountability program around the data that will be produced by the proposed board examination system. The system could easily be designed to produce data on proportion of students from each designated group that achieve certain grades on the examinations, that pass their lower division examinations after their sophomore year, junior year and senior and on the rates of improvement in these indicators. The system could be designed to compare the performance of students in a given school on these measures to the performance of the state's students as a whole and to the performance of schools with similar student populations, and could also be designed to compare these metrics over time in trend line reports. Similarly, it could be designed to identify schools that hit certain accountability triggers that indicate that the school is in need of help or that it has failed to respond to the help it has been given and is in need of reconstitution or other remedy.

Aren't you describing yet another kind of tracking system, designed to sort students out in a way that will open opportunities to some and deny them to others? No, the opposite is true. The purpose of the lower division exam system, which will be for all students, is to get all but the most severely handicapped of those students to the point that they are prepared to succeed at college-level work. We do not mean this a slogan, but rather as a design requirement for the system we are creating. Once the student meets that standard, he or she will be able to go straight to an open-admissions institution without taking any remedial



courses. Today, one third of our students don't even finish high school. Of those that do, about two thirds go on to college, but the vast majority of those who go on to college fail to complete a degree program. They fail because they cannot do the work. If these students were able to do the work, many more would finish high school, many more of them would go on to college and many more of those who go on to college would end up with a degree. In the United States, those who begin in a 2-year college have the option of going on to selective colleges, including research universities, to complete a 4-year degree. In the system we are proposing, everyone would have the options that only a few now do. That is not tracking. It is the opposite of tracking.

Why are you proposing a lower division and an upper division program? Why not just one program for all students that ends at the end of the senior year and produces a range of grades? Most national education systems end the common program for all students at the end of the year in which students turn 16. After that, students go their own ways. Prior to that point, they are all expected to complete a common curriculum, the glue that holds the country together. There is no reason for the United States to get to the same place two years later, which would waste an enormous amount of money and the time of teachers and students alike. The difference is this: In other countries, they sort out the students at the end of what we call the sophomore year, severely limiting their choices as they take the next step. We would not do that, instead preparing all students for college and giving them all a shot at the brass ring. This makes sense to us in an age in which virtually all economists are agreed that it is virtually impossible to support a family above the poverty line without at least two years of college.

Are you really suggesting that our students go off to college at the age of 16? Many parents will think that they are not mature enough to handle the independence and will be afraid that they will come under the influence of kids who drink a lot, do drugs and engage in other behavior that frightens them As increasing numbers of students move on early, the classrooms they would otherwise have occupied in their high schools will empty. We suggest that you encourage your open-admissions institutions to establish branch campuses at these high schools. Then these students would actually attend college in the same buildings they would otherwise have gone to college in, at least for their core college curriculum. They will come home every night to their parents' home. The state will not have to build any new buildings. The students will be able to participate in the same sports teams they would otherwise have participated in. But they will be going to college.

Many of the lower division students will be in schools in which the teachers will themselves be low-performing. How would we deal with this issue? You will be giving these teachers something they probably have not had before, namely, high quality curriculum, instructional materials and training that is highly aligned with that curriculum. There is a good deal of research that says that these are the most effective measures you could take to improve the effectiveness of these teachers.

What about the expense? Won't this break the bank? No, it won't. Our planning is based on an estimated cost of \$50 per student per exam (including curriculum guidance but not necessarily instructional materials and not including teacher training) and an assumed program of five courses at that cost per year, for a total cost of \$250 per student per year. At the upper division level, most parents in most states pay for their children to take the AP exams and the IB Baccalaureate exams, save for lower-income parents whose fees are typically covered by the federal government. At the lower division level, most states are currently paying no more than \$25 per subject per student for their tests. If that is true in your state, then the incremental cost for the lower division exams would be no more than \$25 per subject per student. Since schools now spend money on instructional materials and on teacher training, there may be no incremental costs for these items. Schools whose students arrive below grade level may have to spend more money to bring those students up to a level at which they can succeed in these board examination programs. But those schools may now be spending money for that purpose and so it is difficult for us to estimate how much the incremental costs might be to bring these students into the program without having more information about how much is currently being spent for this purpose. In a state that is spending more than \$12,000 per year per student, the incremental costs of the core curriculum and exams would be a very modest percentage of your current expenditures, and will produce a yield out of all proportion to its size. The amount you would have to spend to get your students ready for these courses (that is, ready to do truly grade level work when they get to high school) is money that you would want, in any case, to spend now whether or not you adopt board examination systems.

You would expect that, over time, as more and more students are involved in this program, the net increase in costs would rise relentlessly, as it would for almost all programs. But that is not the case. After a very few years, the net actually decrease to the point that the schools implementing it actually save money. After that point is reached, the net costs of the program actually decrease. This is because of the move-on-when-ready feature. As the program reaches more and more students, more high school programs empty out, as more students leave high school after the sophomore or junior years, thus saving money. We are proposing to states that they reprogram this money, sending most of it back to the high schools. Some of it would be used to pay for extra support offered to students who need that support to succeed in their board examination courses or who do not pass their exams on the first try and need special help to succeed on their second try. Some will be used to pay for the instructional materials and examinations and teacher training, to provide bonuses to teachers who teach these courses (especially to teachers of students from low-income families who take the courses and get high grades on them) and to offer scholarships in college to students who get high scores on their examinations. We can help a state to structure policies of this sort that would result in high schools keeping most of the savings from the program, so that the net cost of high school would be much the same that it is today, but the public would be getting far more for its money.

Some students enter high school two or more years behind grade level. Others may be close to grade level, but far behind in particular topics. What would you

have us do about these students? Some of these board examination systems have recommended curricula for the middle schools, intended to prepare students to take a lower division program that will in turn prepare them for the upper division board examination program. We would encourage the middle schools to use these programs. One of the organizations that provides board examination systems has teamed up with another organization, affiliated with NCEE, that offers supplementary programs, technical assistance and professional development at the middle school and lower division level specifically intended for students who are two or more years behind. This organization also offers resources intended to help students who are behind in particular topics. These, too, would be available to the schools in the program.

You are proposing a giant change in long-established policies and practices. Are you expecting us to convert to this new system all at once? No, not at all. We are asking you to select between 10 and 20 high schools in the state in which to conduct a multi-year demonstration or pilot program. These schools should be in many parts of the state and should, taken together, represent the student population of the state as a whole.

Will the state need new legislation to implement this program? Yes, it will. At a minimum, the state will have to pass legislation awarding a high school diploma to students who pass their lower division exams. It will also have to adopt the policy of accepting all in its open-admission 2-year and 4-year colleges applicants who pass the lower division exams, with no need to take remedial courses.

What would the state have to do to become part of this program? We need a signed Memorandum of Understanding from your chief state school officer in which he or she personally expresses his or her commitment to do everything possible to develop a program of the kind described in the MOU, and commits to finding 10 to 20 schools in the state to begin the pilot program next year.

## Brief Prospectus for a State Consortium On Board Examination Systems

*from* the National Center on Education and the Economy

Support for national standards is growing stronger by the day. It seems clear that the U.S. Department of Education is giving high priority to following up the development of the Common Core standards by committing large sums to the construction of assessments to match the national standards.

One might well think that the nation is on the verge of solving its standards problems, and is therefore well on the way to putting in place the secret sauce that has up until now been known only to those countries with the most successful education systems. But that is not the case. The National Center on Education and the Economy has been benchmarking the countries with the best education systems for twenty years, and we know of no case in which a country's educational success can be attributed to implementation of internationally benchmarked student achievement standards accompanied by matching American-style tests.

Our own work, many papers by John Bishop; the best research using the PISA data (now the world's largest data base on the effects of national education systems), and recent work by others all point in another direction. What drives success in those systems is a combination of two key factors: the presence of a highly aligned national instructional system and the decision to recruit the nation's teachers from the top third of the distribution of college students.

The indispensable elements of these instructional systems are: 1) high school programs consisting of a logical ordering of courses in the core curriculum, typically their native language, mathematics, the sciences, history and the arts; 2) well designed courses described by a detailed syllabus; 3) high quality examinations (typically dominated by essay questions to which the students must write extended responses) that are designed to assess the extent to which the student has command of the material described in the syllabus and can apply it to unfamiliar problems; 4) professional scoring of the examinations; and 5) high quality training of the teachers who will teach the courses, training that is explicitly designed for this purpose.

Sometimes all of this comes with explicit statements, in narrative form, of what students are expected to know and be able to do, sometimes not. When they are not explicitly stated, the standards are made evident to all by the syllabi, the annually released exam questions, and examples of the kind of student work that earned a top grade. No one is in any doubt as to what the standards are, but no one imagines that the students would do well on the examinations without the entire apparatus just described. The experts in these other countries would be deeply puzzled at the idea that a country could produce high achievement simply by publishing narrative statement of standards and administering

tests that rely mainly on multiple choice, computer scored tests. We refer to a system with the components just described as Board Examination Systems.

## Using Board Examination Systems to Get to International Standards and Greatly Improve Student Performance at a Very Reasonable Cost

A state could, of course, use the forthcoming Common Core standards to create its own set of Board Examinations, complete with program designs, syllabi for all the courses, examinations, scoring contractors, and teacher training programs. But it would take many years and a great deal of money to duplicate the systems that the highest performing countries have had in place for years.

But there is an alternative. The oldest of these board examinations systems—the University of Cambridge International Examinations—is used by schools in more than 150 countries. So the question is obvious: Why not use the best board examinations that have already been developed rather than starting from scratch? The argument for doing this is very strong. These exams set the real international standard. All over the world, elite high schools use these curricula and exams. When Singapore set out to produce the most successful school system in the world, they contracted with the University of Cambridge International Examinations to build a customized version of the Cambridge “O” Level curriculum and exams.

Using the best of the exams that are already available makes consummate sense. A state that does this benefits from many years and many millions of dollars of development and field testing, all done at someone else’s expense. By adopting these exams, a state would leap right through national standards to international standards. These exams are recognized by universities all over the world, including, but way beyond, universities in the United States. Much more important than either of these arguments, these exams have all the power that comes from fully integrated, highly aligned, very powerful instructional systems, something no state currently has the capacity to produce for itself, even if we were not in the midst of an economic crisis.

## One Instructional System for Lower Secondary, and Another For Upper Secondary

Let’s look for a moment at the structure of the University of Cambridge system. They have two sets of international exams. One is intended to be taken by students at about the age of 16, roughly at the end of our sophomore year of high school, the other a couple of years later. The first set really sets the global compulsory school leaving standard for all students. The second set of exams is pitched at a level that shows students are prepared for entry into very selective colleges.

There is a strong argument for setting up an education system this way. When we look closely at international examinations for students at the end of lower secondary school, the course requirements and standards line up nicely with the expectations of our state open-admissions two-year and four-year colleges. So in the United States we could say to students who pass these exams at 16 or later that they could go right to a two-year or four-year open-admissions college without having to take any remedial courses. If they did not pass, we would know from the sub-scores on their exam just where they fell short and work with them on those things so that they could pass it on a subsequent attempt. A very large number of our high school students get very little out of their senior year anyway and would jump at the chance to get on with their lives. Of course, many students might not be able to pass these exams until the end of the junior or senior year.

But students who pass their board exams at the end of grade ten could also stay in high school and take the courses required to take the upper level board exams. These courses and exams would prepare them for admission to selective colleges.

Our aim would be to get at least 85 percent of the American students to the college-ready standard. Students would be able to take the lower division exams as often as they liked. High schools would be obligated to analyze the sub-scores of those who failed and use them to construct a customized program of study that would address their weak points, so that they would stand a much better chance of succeeding the next time they take the exam. Middle schools would be encouraged to adopt programs intended to prepare their students for the high school board examination programs. Some of the high school board examination programs already provide middle school program designs for this purpose.

## How We Could Get Started

We've identified three board examination systems that appear to be suitable and ready to use at the end of sophomore year level: the Pearson/Edexcel International General Certificate of Secondary Education Examinations, the University of Cambridge International General Certificate of Secondary Education Examinations, and the ACT's new QualityCore program. With just a few alterations (with the British exams, there are matters of British vs. American English, for example, and the substitution perhaps of novels in a syllabus that are more American for others that are less so, for another example), these systems could be up and running in a state very quickly.

What does it mean to be up and running? What we have in mind is a state saying to its high schools, "First, you must offer at least one of the two board examinations systems we have approved for this purpose to your lower division students. If they get a passing grade, they will be admitted to any public open-admissions institution in the state with no further questions asked. If they pass, they also have the option of staying in high school and taking one of the upper division board examination programs we have approved. Among those programs are a selected set of Advanced Placement courses, the International Baccalaureate Diploma Program, the Pearson-Edexcel "A" Level program, the University of Cambridge AICE Program, or the ACT QualityCore program (upper

division). Students who take these state-approved upper division board examinations and get sufficiently high grades on them will qualify for state scholarships in any open-admissions or selective college they want to go to.”

Schools implementing these programs would have to make sure that their teachers participate in the teacher training offered by the organizations providing the examination systems.

## The Idea of a State Collaborative

We are proposing that a group of states band together to build a system of the kind just described. The National Center on Education and the Economy is prepared to provide the technical support needed to make such a system work. At the outset, it would be important to make sure that the exams used at the end of the lower division program have the same modifications and that they are set to the same pass standards, assuming that there is interest among the states in being able to compare student performance within their state as well as across the states. This will require moderating the exams to the same standard, so that an A is an A across exam systems and across states. By doing this, the states will also be enhancing student access to out-of-state schools.

During this initial period it will also be critical to ensure that passing scores on the lower division exams that allow students to move on to open-admissions colleges and universities are grounded in solid evidence about the knowledge and skills necessary for success in first year undergraduate credit-bearing courses. NCEE will engage the nation’s leading researchers to conduct these studies.

Later on, we think it will be important to consider making customized changes in the curriculum and examinations, just as Singapore has done. If the current effort to get agreement on Common Core standards is successful, we would want to modify the providers’ offerings to reflect those standards. Beyond that, other changes that might be worth thinking about are those needed to reflect cross-disciplinary skills that are not already built in to some of the exams such as those in the SCANS list, what the British call “key skills,” or the list of cross-cutting skills that New Standards came up with. We also have in mind the possibility that these instructional systems should be optimized for building students’ creative and innovative skills and aptitudes. Another possibility is building board exams that offer students the alternative of emphasizing either traditional instructional methods or instruction that embraces project- and problem-based learning. It might also be possible to create alternative programs within the structure, even at the lower division level that would allow students to “major” in the STEM disciplines or the arts and humanities. And there is empirical work being done in other parts of the world to discover what the natural developmental sequences are for students who are mastering the core disciplines, work that should enable us to construct curriculum and assessment systems that more accurately reflect the natural progression of skill development.

It will be much less expensive for the states to collaborate on such development projects and to have one organization responsible for coordinating such research and working

with the states to come up with common requirements that can then become the basis of periodic changes in the board examination systems, so they evolve over time to meet the changing requirements of the participating states. The National Center on Education and the Economy, the originator of the New Standards in the 1990s and a leader in the national standards movement, proposes to play this coordination and support role. NCEE has access to many of the nation's leading cognitive scientists, psychometricians and curriculum experts and is in an ideal position to take on this role. NCEE also has been working closely with all of the Board Examination organizations mentioned.

## Next Steps

NCEE is currently seeking funds from national foundations and plans to work with states that want to include these ideas in their applications to the U.S. Department of Education for funds from the "Race to the Top" program authorized by the recently passed economic recovery legislation. These funds would be used to fund a collaborative of states planning to implement a demonstration program of the kind described above. We have presented these ideas to the foundations with which we have been talking as developmental, meaning that the actual design of the program may differ in important respects from the exact details described above as our research and development work proceeds and the detailed needs of the states involved evolve, but the principles underlying the design will not change.

We are seeking states that are willing to seriously consider building a system of the kind just described. And we are seeking enough funds to cover research, development, coordination and operational costs during the developmental period, of at least three years. These costs will include some or all of the costs of purchasing the curriculum, training the teachers, administering the exams, and providing funds for incentive payments to teachers, if necessary.

States interested in receiving more information about the State Consortium on Board Examination Systems should contact Marc Tucker, President of NCEE at [mtucker@ncee.org](mailto:mtucker@ncee.org) or Susan Sclafani, Director of State Services, at [ssclafani@ncee.org](mailto:ssclafani@ncee.org) or call 202-379-1800 in Washington, DC.

August 2009

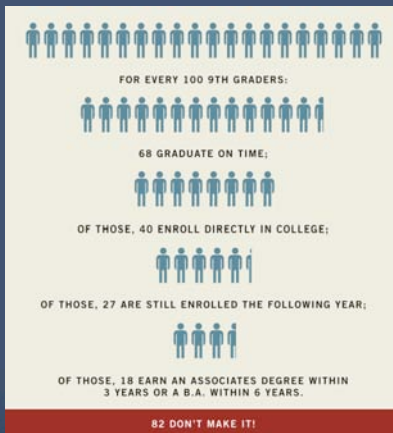


# STATE BOARD EXAMINATION CONSORTIUM

## VERMONT MEETING

April 2010

## Portrait of a Failing System



Source: James Hunt, Jr. and Thomas Tierney, *American Higher Education: How Does It Measure Up for the 21st Century?* (San Jose, Calif.: National Center for Public Policy and Higher Education, May 2006).

## Board Exam Systems

A sound core program  
of courses defining  
what it means to be  
an educated person

Thoughtfully  
constructed course  
designs captured  
in a syllabus

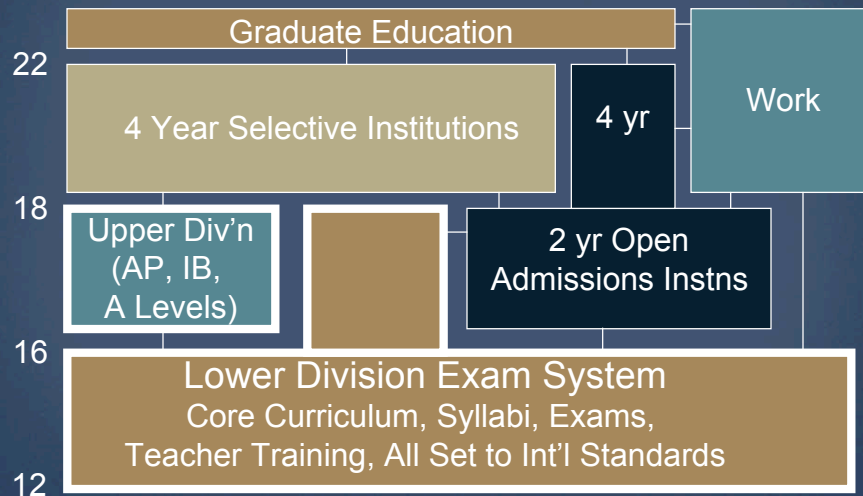
High quality exams  
derived from the  
curriculum using  
multiple assessment  
methods

Quality teacher  
training  
matched to  
the course syllabi

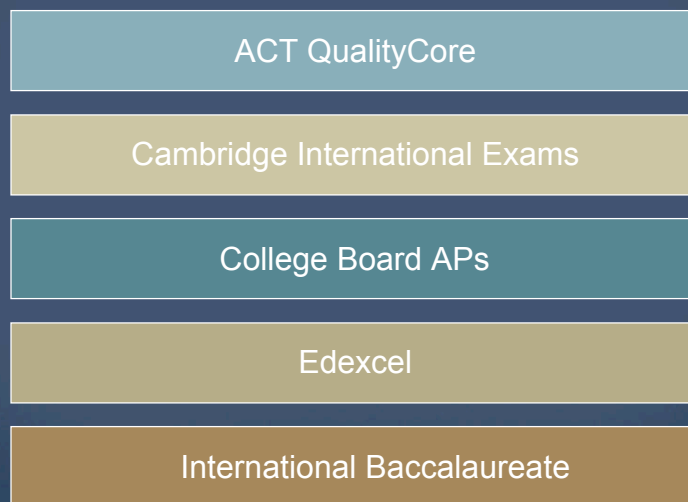
## Why Board Exams?

- Best global research shows that board exam systems key to success of world's best performing systems for ALL students
- Why? Because they provide the support students must have to succeed
- Crucially important for low-performing schools and students

## How our System Would Work



## Board Exams: The Best



## Lower Division Ready Now

- ACT QualityCore
- Cambridge International General Certificate of Secondary Education (IGCSE) Exams
- Edexcel IGCSE Exams

## Lower Division: A Closer Look

- Not elite programs
- But designed to prepare students for elite programs
- Can get students college-ready by 16
- Many bright students are dropping out because they are bored
- But give less-prepared students until 18
- Help targeted to students weak points in grades 11 and 12 can make all the difference

## Upper Division Ready Now

- ACT QualityCore
- Cambridge AICE Exams
- College Board Advanced Placement
- Edexcel A-level version
- International Baccalaureate

## Key Benefits for Schools

- Students motivated to take tough courses and study hard
- A very strong curriculum and teachers trained to teach it for schools and students with weak instructional resources
- A strong system for preparing the most able students for selective colleges
- A way to identify students not college-ready by the end of the their sophomore year and to provide instruction carefully focused on the things they must do to succeed
- Trading a time-in-the-seat system for one that rewards performance

## What's in it for Higher Ed Institutions?

- Will eventually get colleges out of the remedial education business, while, at the same time:
- Will get many more students applying to H.E. institutions ready to do the work
- Access will improve and *persistence will greatly increase*

## What You Will Get as a Member of the Consortium

- Powerful method of raising student achievement
- Big cost savings
- A seat at the table for design of multi-state system
- Access to many of the most capable researchers in the United States
- The ability to compare your scores to those of other states and countries on internationally benchmarked examinations

## Implementation

- Start with 10 to 20 demonstration schools
- Make sure they are reasonably representative
- Try to set up feeder systems to include higher ed institutions
- Volunteer schools, volunteer teachers, volunteer students
- Award *college-ready diploma to those who pass lower division exams*
- Expand as system proves itself

## Costs

- Exams: \$50/student/5 courses
- Teacher Training: \$500-850/teacher
- Materials: \$35/student/5 courses

## On the Other Side of the Ledger

- Race to the Top Assessment Program
- i3 Competition
- Move-on-when-ready savings (state policy)
- **BOTTOM LINE:** After initial investment, schools actually save money AND student performance improves greatly

